

The brief introduction of the circuit of 2.4g Wireless Speaker

1. The RCA connector J3 is the input for stereo audio signals (L and R). Also the audio signals can be inputted from the earphone jack J4. The audio signals will be disconnected from J3 if it is inputted from J4 so only one group of the audio signals will be connected to the RF module M1.
2. The audio signals sent to RF module M1 will be converted to digital signals and then be transmitted from the antenna. The push button S2 is used to change the channel.
3. A/D sample and Coder processing in RF module M1: the coder of low noise audios will translate the analog audio signals from the audio input into digital signals with 64K sampling rate at 16bit, and applied the coder program in MCU to code the date into special format.
4. Coder and modulation in RF module M1: The MCU will code the digital signal from coder and send the data to 2.4G Transmitter to modulation into GFSK and transmit.
5. In RF module M1, there is a crystal of 16.00MHz which is connected to MCU and 2.4G transmitter IC to support the frequency interface.
6. Antenna connecting: the positive of the antenna will be connected to the antenna fix point on the transmitter PCB board, and the negative of the antenna will be connected to the ground.
7. The power is provided from the power jack J1. The power should be DC5V/2A. It can be an AC/DC adapter. S1 is the power switch. Red LED D1 is the indicator for power on.
8. The input power is also connected to J2 as the charging power for the receiver unit.